REMARKS

Claims 1-51 are in the application.

The specification is amended to delete reference to the semiconductor substrate generally with reference 10, as numeral 10 is used later in the specification (i.e. page 9, second paragraph) to designate the transistor gate construction. Entry of this amendment is requested.

Independent claim 1 recites reducing partial pressure of the oxidizer and the reducer within the chamber by flowing an inert gas to the chamber while chamber pressure and chamber temperature are at or above those of the conditions during the exposing. Independent claim 50 recites reducing partial pressure of the H_2O and H_2 within the chamber by flowing an inert gas to the chamber while chamber pressure and chamber temperature are at or above those of the conditions during the exposing. Each of these claims is rejected in one instance over a combination of Joo et al. and Storbeck et al. and in another instance over a combination of Joo et al. with Miner et al. Applicant disagrees and requests reconsideration.

Joo et al. teaches stopping of its selective oxidation by stopping the flow of the oxidation process gases to the chamber and decreasing temperature. Nothing else of significance is provided by Joo et al. as to what occurs after its selective oxidation process. The Examiner relies upon paragraph **[0043]** of Storbeck et al. where it is stated that nitrogen or another inert gas flows to the chamber after the selective oxidation treatment. However, such is referred to in the context of the Storbeck et al.

Fig. 3 processing. Such clearly discloses N_2 flow by itself, and after ceasing of H_2 flow, and further accordingly after the flow of a mixture of H_2 and H_2O has been ceased. Thereby, Fig. 3 does not teach the act recited in Applicant's claim 1 of reducing partial pressure of the oxidizer and the reducer by flowing an inert gas to the chamber since the flow of H_2 and H_2O has already ceased. Accordingly, Fig. 3 of Storbeck et al. teaches partial pressure reduction of H_2 and H_2O by ceasing flow of H_2 and H_2O, not by an act of flowing inert gas as Applicant recites in claim 1. The same essential argument applies with respect to the allowability of claim 50 with respect to the specifically recited H_2O and H_2.

It is recognized that paragraph **[0044]** of Storbeck et al. teaches that a hydrogen/nitrogen mixture may be substituted for the Fig. 3 depicted pure H_2 flow post-oxidation. However, independent claim 1 requires reducing partial pressure of both the oxidizer and the reducer. Flowing H_2 with N_2 pursuant to paragraph **[0044]** of Storbeck et al. would increase the partial pressure of the H_2 within the chamber, which is contrary to the reducing limitation required by Applicant's independent claims 1 and 50.

Further and regardless, Applicant's independent claim 1 requires the act of reducing partial pressure by flowing an inert gas to the chamber while the chamber pressure and chamber temperature are at or above those of the conditions during the exposing. The Storbeck et al. depicted Fig. 3 N_2 flow occurs at a temperature below T_2 and accordingly certainly below its T_3 selective oxidation temperature. Further, the depicted post-oxidation H_2

flow (again, which Storbeck et al. in paragraph **[0044]** indicates can be a mixture of H_2 and N_2) is conducted at a continual decreasing temperature rate which is thereby below those of the conditions during the T_3 exposing, and accordingly opposite to that which Applicant recites in independent claim 1 and correspondingly independent claim 50.

For either of the above reasons, Applicant's independent claims 1 and 50 recite something which is neither shown nor suggested in either of Joo et al. or Storbeck et al., and accordingly the combination of such references does not include all the limitations of Applicant' independent claims 1 and 50. Accordingly, the rejection of such claims over a combination of Joo et al. and Storbeck et al. should be withdrawn, and action to that end is requested.

Further regarding Miner et al. and independent claims 1 and 50, Miner et al. at col.10, ln.64 - col.11, ln.3 teaches wafer cool-down simultaneously with N_2 gas flow. Accordingly, partial pressures of an oxidizer and a reducer (i.e. H_2O and H_2) are not reduced at any time while chamber pressure and chamber temperature are at or above those of the conditions during the exposing. Rather, Miner et al. teach inert gas flow only at a chamber temperature which is below those of the conditions during the exposing. Further, Miner et al. does not teach flow or presence of oxidizer, reducer and inert gas in the chamber at the same time thereby imparting a partial pressure reducing affect as Applicant recites in independent claims 1 and 50. Accordingly again, Applicant's independent claims 1 and 50 recite

something which is not disclosed by Miner et al. Thereby, the combination of Joo et al. with Miner et al. does not encompass all of the limitations of Applicant's independent claims 1 and 50. Accordingly, the rejection of independent claims 1 and 50 over Joo et al. and Miner et al. should be withdrawn, and action to that end is requested.

Applicant's independent claims 31 also recites reducing partial pressure of the oxidizer and the reducer (or H_2O and H_2 with respect to claim 51) within the chamber by flowing an inert gas within the chamber. As argued above, neither Joo et al., Storbeck et al., nor Miner et al. teaches reducing partial pressure of both the oxidizer and the reducer by flowing an inert gas to the chamber. Accordingly, Applicant's independent claims 31 and 51 recite something which is not encompassed by any the collection or combination of these references and accordingly the obviousness rejection should be withdrawn, and action to that end is requested.

Further and regardless, each of Applicant's independent claims 31 and 51 recites that the oxidizing conditions comprise pressure greater than room ambient pressure. Not one of the cited references is seen to remotely suggest or imply any processing occurring relative to their chambers at pressures greater than room ambient pressure. For at least this additional reason, Applicant's independent claims 31 and 51 recite something which is not shown by any of the references, and therefore no collection of such references meets all the limitation of claims 31 and 51. Accordingly, such should be allowed at least for this additional reason.

Further, independent claims 31 and 51 recite partial pressure reduction of the oxidizer and the reducer by flowing an inert gas to the chamber while chamber pressure is greater than room ambient pressure. Since none of the references recite any processing at a pressure greater than room ambient pressure, it is further inconceivable that any of such references could suggest doing that which Applicant specifically recites in this regard with respect to its act of reducing partial pressure of the oxidizer and the reducer. Further, each of claims 31 and 51 recites the act of reducing pressure to below room ambient pressure within the chamber after the partial pressure reducing and while flowing the reducer and the oxidizer (claim 31) or H_2O and H_2 (claim 51) to the chamber. In summary, since not one of the references teaches any processing at pressures greater than room ambient pressure, the references in combination clearly do not and could not suggest that which applicant specifically recites occurs at pressure greater than room ambient pressure.

For at least these additional reasons, Applicant's independent claims 31 and 51 should be allowed, and action to that end is requested.

Applicant's dependent claim should be allowed as depending from allowable base claims, and for their own recited features which are neither shown nor suggested in the cited art.

An earnest attempt has been made to indicate that this application is in condition for allowance, and action to that end is requested.

Respectfully submitted,

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